

Listing of Claims

1. (Currently amended) A method for processing data received from an input device through an interface, comprising:

(a) examining one or more bytes of a PS/2 data packet received by a port driver;
(b) detecting the presence within the PS/2 data packet of data not recognized by the port driver;

(c) storing the unrecognized data from the PS/2 data packet;
(d) replacing the portion of the PS/2 data packet containing the unrecognized data with a substitute value;

(e) receiving a data structure created from the PS/2 data packet, the data structure containing a value corresponding to the substitute value;

(f) retrieving the stored data upon detecting the data structure value corresponding to the substitute value; and

(g) providing input data to at least one application program based on the retrieved data;

and wherein

steps (a) through (g) are carried out by a filter driver in data communication with the port driver,

the filter driver is in data communication with a third driver,

the third driver is in data communication with the port driver,

the third driver receives data from the PS/2 data packet and the substitute value,

and

the third driver provides the data structure to the filter driver.

2. (Canceled)

3. (Currently amended) The method of claim 21, wherein the unrecognized data comprises input data inserted into a portion of ~~a~~ the PS/2 data packet reserved for a specific data type, and

wherein the port driver does not recognize the inserted data as being distinct from the specific data type.

4. (Canceled)

5. (Canceled)

6. (Currently amended) The method of claim 21, wherein step (a) comprises examining one or more bytes containing a flag indicating the presence within the PS/2 data packet of unrecognized data.

7. (Currently amended) The method of claim 21, wherein the unrecognized data comprises horizontal scrolling data from a computer mouse.

8. (Original) The method of claim 7, further comprising repeating steps (a) through (g) for a second PS/2 data packet containing a second type of unrecognized data, wherein the second type of unrecognized data comprises high resolution vertical scroll data.

9. (Currently amended) A method for processing data received from an input device through an interface, comprising:

(a) examining one or more bytes of a PS/2 data packet received by a port driver;

(b) detecting the presence within the PS/2 data packet of data not recognized by the port driver, wherein the unrecognized data comprises horizontal scrolling data from a computer mouse;

(c) storing the unrecognized data from the PS/2 data packet;

(d) replacing the portion of the PS/2 data packet containing the unrecognized data with a substitute value;

(e) receiving a data structure created from the PS/2 data packet, the data structure containing a value corresponding to the substitute value;

(f) retrieving the stored data upon detecting the data structure value corresponding to the substitute value;

(g) providing input data to at least one application program based on the retrieved data;
and

(h) repeating steps (a) through (g) for a second PS/2 data packet containing a second type of unrecognized data, wherein the second type of unrecognized data comprises high resolution vertical scroll data,

and wherein~~The method of claim 8, wherein:~~

the filter driver is in data communication with a third driver,

the third driver is in data communication with the port driver,

the third driver receives data from the PS/2 data packets and the substitute values,

the third driver provides the data structures to the filter driver,

performance of step (g) with regard to the high resolution vertical scroll data comprises insertion into the data structure of a value based upon the high resolution vertical scroll data, and

performance of step (g) with regard to the horizontal scroll data comprises providing to an application program, independent of the data structure, a value based upon the horizontal scroll data.

10. (Original) The method of claim 7, wherein step (g) comprises providing horizontal scroll data to a first application program which provides horizontal scroll information to a second application program.

11. (Currently amended) A computer-readable medium having stored thereon data instructions which, when executed by a processor, cause the processor to perform steps comprising:

(a) examining one or more bytes of a PS/2 data packet received by a port driver;

(b) detecting the presence within the PS/2 data packet of data not recognized by the port driver;

(c) storing the unrecognized data from the PS/2 data packet;

(d) replacing the portion of the PS/2 data packet containing the unrecognized data with a substitute value;

(e) receiving a data structure created from the PS/2 data packet, the data structure containing a value corresponding to the substitute value;

(f) retrieving the stored data upon detecting the data structure value corresponding to the substitute value; and

(g) providing input data to at least one application program based on the retrieved data data,

and wherein

steps (a) through (g) are carried out by a filter driver in data communication with the port driver,

the filter driver is in data communication with a third driver,

the third driver is in data communication with the port driver,

the third driver receives data from the PS/2 data packet and the substitute value,

and

the third driver provides the data structure to the filter driver.

12. (Canceled)

13. (Currently amended) The computer-readable medium of claim ~~42~~11, wherein the unrecognized data comprises input data inserted into a portion of ~~a the~~ the PS/2 data packet reserved for a specific data type, and wherein the port driver does not recognize the inserted data as being distinct from the specific data type.

14. (Canceled)

15. (Canceled)

16. (Currently amended) The computer-readable medium of claim 1211, wherein step (a) comprises examining one or more bytes containing a flag indicating the presence within the PS/2 data packet of unrecognized data.

17. (Currently amended) The computer-readable medium of claim 1211, wherein the unrecognized data comprises horizontal scrolling data from a computer mouse.

18. (Original) The computer-readable medium of claim 17, comprising additional instructions which, when executed by a processor, cause the processor to perform additional steps comprising repeating steps (a) through (g) for a second PS/2 data packet containing a second type of unrecognized data, wherein the second type of unrecognized data comprises high resolution vertical scroll data.

19. (Currently amended) A computer-readable medium having stored thereon data instructions which, when executed by a processor, cause the processor to perform steps comprising:

(a) examining one or more bytes of a PS/2 data packet received by a port driver;

(b) detecting the presence within the PS/2 data packet of data not recognized by the port driver, wherein the unrecognized data comprises horizontal scrolling data from a computer mouse;

(c) storing the unrecognized data from the PS/2 data packet;

(d) replacing the portion of the PS/2 data packet containing the unrecognized data with a substitute value;

(e) receiving a data structure created from the PS/2 data packet, the data structure containing a value corresponding to the substitute value;

(f) retrieving the stored data upon detecting the data structure value corresponding to the substitute value;

(g) providing input data to at least one application program based on the retrieved data;
and

(h) repeating steps (a) through (g) for a second PS/2 data packet containing a second type of unrecognized data, wherein the second type of unrecognized data comprises high resolution vertical scroll data,

and wherein The computer-readable medium of claim 18, wherein:

the filter driver is in data communication with a third driver,

the third driver is in data communication with the port driver,

the third driver receives data from the PS/2 data packets and the substitute values,

the third driver provides the data structures to the filter driver,

performance of step (g) with regard to the high resolution vertical scroll data comprises insertion into the data structure of a value based upon the high resolution vertical scroll data, and

performance of step (g) with regard to the horizontal scroll data comprises providing to an application program, independent of the data structure, a value based upon the horizontal scroll data.

20. (Original) The computer-readable medium of claim 17, wherein step (g) comprises providing horizontal scroll data to a first application program which provides horizontal scroll information to a second application program.

21. - 27. (Canceled)